

ABSTRACT OF THE DISCLOSURE

A speech recognition method obtains a list of target speech element sequences each containing at least one speech element. For each target speech element sequence, a forward sequence extension model and a backward sequence extension model is obtained. At least one spotted target speech element sequence is found in a set of acoustic observations by matching it against the sequence of speech element models. From the set of acoustic observations, the set of acoustic observations preceding and following the at least one spotted target speech element sequence is obtained. At least one hypothesis of a longer speech element sequence containing the at least one spotted speech element sequence is obtained as a proper subsequence in which the at least one longer speech element sequence is consistent with at least one of the forward sequence extension model and the backward sequence extension model. The hypothesis of a longer speech element sequence is evaluated based on the degree of acoustic match between the longer speech element sequence and at least one of the set of preceding acoustic observations and following acoustic observations.